(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 22 January 2004 (22.01.2004)

(10) International Publication Number WO 2004/007102 A1

- (51) International Patent Classification7: B07C 7/00, 3/00
- (21) International Application Number:

PCT/GB2003/003039

- (22) International Filing Date: 14 July 2003 (14.07.2003)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0216264.2

12 July 2002 (12.07.2002)

- (71) Applicant (for all designated States except US): ROYAL MAIL GROUP PLC [GB/GB]; 148 Old Street, London ECIV 9HQ (GB).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): BRITTON, David, Thomas [GB/GB]; 5 Old Bury Hill Housw, Westcott, Dorking, Surrey, RH4 3JU (GB). LENNARD, Graham, Charles [GB/GB]; 36 Widecombe Gardens, Redbridge, Essex, IG4 5LT (GB). HIPWELL, Graham, Thomas [GB/GB]; 25 Raleigh Park Road, Botley, Oxford OX2 9AZ (GB).

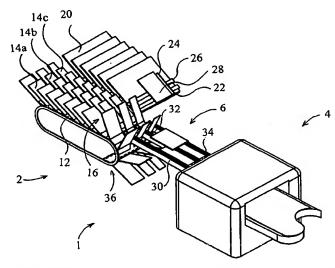
- (74) Agent: ROBSON, Aidan, John; Reddie & Grose, 16 Theobalds Road, London WC1X 8PL (GB).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES,

[Continued on next page]

(54) Title: APPARATUS AND METHOD FOR MERGING ITEMS TO BE SORTED



(57) Abstract: An improved merging apparatus (2) and method for merging items into a pre-sorted sequence of items is provided. The merging apparatus has a series of linked movable receptacles or bins (16) which correspond to the sorting bins (22) of a sorting machine in conjunction with which the apparatus can be used. Each sorting bin (22) and each corresponding movable bin (16) are allocated a location in a sort sequence. Following a sort, the sorted items of in the sorting bins are output into the linked moveable receptacles according to their position in the sort sequence. A user of the preferred merging apparatus (2) can enter the address data of items rejected in the sort into an input device connected to apparatus control means. The control means causes the linked movable bins to move such that the merging bin allocated the position in the sort sequence given by the address data entered by the user is brought to a position in which the user can insert the rejected item.



FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

 as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.